

Listing of Claims

We claim:

1. (Canceled)

2. (Original) A method for minimizing scattering of electromagnetic waves incident upon a material containing particles suspended in a medium, the method comprising:

identifying possible combinations of particles and mediums;

calculating a scattering extinction for each combination based on a refractive index ratio and particle size combination, at a specified wavelength; and

dividing the scattering extinction by the associated particle size to arrive at a value for each combination, wherein the combination with the smallest value is the combination that will minimize scattering of electromagnetic waves.

3. (Original) The method of claim 2 wherein backscattering of the electromagnetic radiation is minimized.

4. (Original) The method of claim 2, wherein the particles are spherical in shape.

5. (Original) The method of claim 2, wherein the particles and the medium of the material are selected so as to also minimize absorption and maximize backscatter of

the electromagnetic waves, thereby making the material a good choice for identification of friend or foe.

6. (Original) A method for minimizing absorption of electromagnetic waves that are incident upon a material containing particles that are suspended in a medium, comprising the steps of:

identifying potential combinations of particles and mediums;

calculating an absorbing extinction for each combination based on a refractive index ratio and particle size of each combination, at a specified wavelength; and

dividing the absorbing extinction by the associated particle size to arrive at a value for each combination, wherein the combination with the smallest value is the combination that will minimize absorbing of the electromagnetic waves.

7. (Original) The method of claim 6, wherein the particles are spherical in shape.